

## Editorial

sun blessed breeze blows remnants of  
winter  
from naked branches  
birds sing

It's not quite Ogden Nash but without a doubt the Earth has been round the sun again...There are things afoot now that it is spring and one of those things is SCiO following through on its stated aim of conquering the world. Invading the south of England is probably a good place to start but let's not draw parallels to HG Wells' martians. There is activity: a lot of activity planned for London and Manchester this year and an open meeting just around the corner. In this issue of the newsletter we have a book review about the systems landscape, we've got some reflections from Patrick and a very interesting summary of the January open day which is the fruit of an immense editing job by Jane. Don't forget to answer Dean's survey!

And you? What are you going to contribute?  
Surely you read more than the Beano?

Bromley anyone?



## This Issue

- 2 Spring 2014
- 3 Bookworm
- 4 Open Notes: notes from the open day on 13th January 2014
- 7 Open meeting: 7th April 2014
- 8 Thinking survey
- 9 Calendar 2014

## Spring 2014

Just back from two days walking in the lake district and despite the snow and ice underfoot, there were the unmistakable signs of spring – a crispness and clarity to the air and the first head-banging of the season from woodpeckers echoing across the lake. And spring also brings with it new initiatives for practitioners and academics alike. Organisations have woken from their Christmas hibernation and have kicked off new projects that were on hold from the winter break and the conference season seems to have started early this year.

For those of us delivering support to businesses, there seems to be more large scale organisational structure and change work. Partly this seems to be a reaction to the economic situation, public sector organisations are having to get serious in their responses to the cuts and private sector organisations are either having to do more radical change to survive, or – and mercifully this seems to be the majority – are re-organising to deal with opportunities in their environment and new potential for growth. Too soon to get over-excited about prospects for recovery, but at least it isn't all doom and gloom anymore. And for the ones that are prospering, there is a palpable optimism. I think for me, one of the most welcome changes has been a new realism even from the hard pressed public sector. Nobody now seems to believe that it'll all go back to where it was and they've gone through fatalistic acceptance to a dramatically more open minded outlook. For the systems practitioner this new openness means that we no longer have to swim against a tide of received wisdom about how to design and run organisations. The "old wisdom" is no longer so easily accepted and its been several years now since I saw blank looks on faces when talking about systems approaches.

In academic circles though, things seem slightly less progressive. I recently had to disabuse a noted speaker on Complexity Theory who asserted that VSM was based on a mechanistic model. I pointed out that the first book on VSM - a book ostensibly about business - had been used as a teaching text in medical schools about the workings of the human nervous system. The complexity theorist was astonished (and a little displeased) as it's an article of faith in that community that everything before them was based on mechanistic thinking. As a wise friend of mine often said to me – "stamping out ignorance is a full time job".

And so to spring for SCiO. We have as usual for the April meeting the AGM. This year we're proposing to add it on to the end of the open day at Manchester Business School, so there will be a full, normal open day and the AGM will neatly fill the gap between the open day and the bar opening. Jane Searles has sent out a message about elections to the board and there are a couple of currently uncontested positions for which we would welcome volunteers.

Looking further forward, the plan for the coming year is to carry on with the broadly the same set of activities as a present, development and open meetings in Manchester & London, outreach and common interest groups and with the professional development programme.

In addition though there are three new initiatives. First is a formal agreement to work with the UK Systems Society to explore how to work together across a broad range of activities. Second is an agreement in principle at least to set up as a publisher, so if you would be interested in getting involved in that, or in getting material published, then do get in touch. And the third is that we seem to be slightly closer to setting up SCiO groups in other countries. There are a few areas in Europe particularly where there are enough people interested to make this a realistic prospect and we're keen to hear from anyone who would be interested in acting as the focus for a SCiO network in your part of the world. Our experience has been that often, potential members are unaware of one another so if you think that SCiO could help act as a way to enable you to network and to build a community in your area, then do get in touch. Personally I think this has huge potential.

Patrick Hoverstadt

## Bookworm

### A Journey Through The Systems Landscape

Harold "Bud" Lawson

College Publications 2010 ISBN 9-781848-900103

This book is the first of a series produced by College Publications called "Systems Thinking and Systems Engineering". Harold "Bud" Lawson has worked in industry and taught Systems Thinking and Learning Organisations/Organisational Change for a number of years. Written in 8 chapters, "A Journey Through The Systems Landscape" takes us from "An Introduction to Systems" to "Organisations and Enterprises as Systems" via four "interludes" with Case Studies in Crisis Management, Organizational Development, Architectural Concepts and Principles and Life Cycle Managing Ontologies. At each chapter more depth and learning is added to the journey with the idea that by the end destination, the reader will be in a position to develop their own concept maps, systemigrams, stick and flow diagrams and life cycle models etc etc. Along the way there are "Knowledge Verification" lists at the end of each Chapter with questions ranging from "Identify systems that are important for an enterprise with which you are familiar" (Chapter 1), through "Describe how versions of systems baselines and/or configurations are identified for Systems-of-Interest that are owned or operated by an enterprise with which you are familiar" (Chapter 4) to "Why is cybernetics and organisational cybernetics so important?" (Chapter 8) The conclusion has questions around learning from the book generally and includes issues like "Learning as an Ethical Activity".

"A Journey Through The Systems Landscape" is a book I would recommend to undergraduate students and seasoned practitioners alike. It is well laid out and has a plethora of attractive and clear diagrams showing many different skills and many different ways of considering data. Lawson has the communication skills of a good teacher and an excellent understanding of what makes a good learner. He takes information from many complex books and simplifies it without losing any of the meaning – a rare skill! People who have struggled through Peter Senge's "The Fifth Discipline" would do well to read this book and then go back to the Fifth Discipline Workbook newly refreshed. Managers working in complex organisations who are trying to develop strategies and have heard of/read Senge would benefit from this book as the explanations of how to USE the concepts and effect real change is clearly explained and the Case Studies add to the experience. Lawson is trying to lead the journey for an Enterprise to become a true "Learning Organisation".

Lawson says "In this book, focus is placed upon the man-made systems and system situations that are of importance for individuals as well as for various groups including public and private organisations and their enterprises in developing capabilities for learning to think and act in terms of systems." There is a lot packed in that sentence but I believe Lawson achieves his goal. I also believe the book would be so much better with an index!!

Anne Maguire

## SCiO Open day Meeting 13 January 2014 – BT HQ London

### SCiO Open day Meeting 13 January 2014 – BT HQ London

The morning consisted of a pre-meeting Introduction to VSM - Patrick Hoverstadt , with main sessions on Action Based Learning - Danny Chesterman and Requisite Inefficiency - Ivo Velitchkov. The afternoon was a single session playing The Perspectivity Game - Tom Hitchman. Participants on the day have received detailed notes compiled by Jonathan Higginbottom which had been edited and summarised for this article by Jane Searles.

### Stafford Beer's VSM – an introduction – Patrick Hoverstadt

The Structure of Organisation applies to many things such as enterprises and Social Systems. Similarly to studies of complexity, the focus is on the invariant rules to address this diversity of application. Patrick sketched Stafford Beers VSM diagram to show the principle interactions of

1. The Environment (with resources and unmet needs)
2. The Operations (consuming resources to deliver value and meet needs)
3. The Management (observing changes in the environment and steering Operations to react to these changes)

Patrick then described these systems in more detail describing systems 1,2,3,3\*,4 and 5 and their inter-connections and how the levels of the recursion are connected. Each System1 contains a number of embedded Systems (or units) of the same form (1,2,3,3\*,4 and 5) and so on. Stafford Beer studied biology and neurology to identify the invariant rules for survival in a changing environment and noted that they work at many levels. For the body to survive the organs must survive for organs to survive the organ cells must survive. This recursion is very powerful. It simplifies the system in focus and allows multiple systems to be stacked like matryoshka to cope with many changes in the Environment and still thrive. The fractal repeating of systems at different levels leads to each level being able to focus on different priorities.

The structure must match that of the environment or stuff is missed. The child abuse that happened in a Clwyd care home was known about but there was no space for those messages to be heard.

Patrick discussed specialising the units of System1 at different recursion levels for task, geography, customer or time, reminding us that the VSM is not that tall. All complexity and variety from the environment is typically balanced along the lines between the boxes (of the diagram on the flipchart). Henry Ford matched the variety of the environment by creating cars 'in any colour as long as they are black' with a variety of 1 is not something that Ford would consider today in a more demanding market. In 1908 the response was matched to the variety that the environment would sustain.

### Action Based Learning – Danny Chesterman

Danny left a career in HR when realised how self-serving HR was, to become a fellow traveller (not an expert) exploring Leadership and whole system development. He first talked about complex projects, which have both uncertain goals and approach, which he distinguished from complicated projects. Complex projects make us ask what question we look at, and what came out of it. They address uncertainty and ambiguity both internally and externally e.g. 'how to raise the life chances of the under fives in Wales'.

95% of Government Policy change is delivered through change projects and most of these are assessed as failing even though MSP was created for the management of successful programmes. This is despite adequate resourcing and the critical nature of the desired changes. The narrative of these complex projects is linear thinking. Visual connectivity is used assuming a high degree of predictability in Prince2 - PProjects IN Controlled Environments 2. The reality of change is emergent, unpredictable, diverse and abounds in ambiguity. From an OD view you would deal with complex projects with your colleagues considering social systems especially in the Public Service. These have emergent and divergent themes. There are no joins between OD and PRINCE 2.

Danny described the complex projects research group he was engaged with, including 12 organisations including DWP, BAES, Wales Director of Public Health, Audit commission, An Energy Co, and Local Authorities and they all struggled to manage complex projects. The focus of the work was on reflection on practice, visits, paired interviews and write-ups of findings. Workshops were used e.g. to measure complexity at project start-up. These had the side effect of interrupting linear thinking. Danny went on to describe their approach in more detail.

Alex was one of the project members. She worked in a project team working with Health to trial Action Research and was also participating in this SCiO session. Alex worked with NHS in Medical Education Training and noted how very important delivering on the Francis report in that context. This report was often quoted and spoken of yet only two people within this context had actually read it. The Audit Commission said 'we keep reporting lessons learnt but no one reads them' projects are not improving. The Audit commission may be wondering if they are not read because they are a government department?

The complex project research group concluded that some Systems are resistant to learning and that people often do not have the context to shape the improvement. Such people cannot change the system but know how it needs to change. Often the best person to change a system is the one who is least in the office.

Ben confirmed that his experience working with Local Authorities no one reads NAO best practice guidance. People do not read reports so they need to be coached allowing them to learn in the moment. Dave did a word frequency count on the Francis report. Noting that there were: 1600 system(s), 600 Leadership(s) and 400 Management(s)

Danny then moved on to action learning. What is it that controls the behaviour of most people? The social system is dominant. Governance in education does not support exploring and trialling. The social system will block change and wait until the changes are washed out.

Action Learning uses all these themes to make us realise that one needs:

1. To work with politics
2. Understanding why projects fail - Learn from others
3. Do the work and be in the moment – addressing the knowing/doing gap

This 'in the moment' viscerality is achieved using on the job learning. The learning needs to be immediate – as you do it. Reflection needs to be a part of daily work. Individuals need to be totally involved to change.

CIPD did some bold research on the Learning and Development gap [Bill Tate]. Its focus was the application of good leadership research. It found that often organisations were looking in the wrong place and had no faith in their individuals, but rather looked externally and these were the same organisations that had failed to create a space for leaders and leadership to grow within the same organisations. CIPD are interested in how to develop future leaders within organisations by changing the organisation.

Politics was mentioned as popularly deriving from poly (many) and tics (parasites). Politics is horrid and messy but you cannot exclude it. You must accept it and engage with it. It can be seen as the authoritative allocation of values for a society. Politics will appear when people get involved in deciding 'who gets what, when and how'. Perhaps politics is best used to balance Autonomy and Democracy. Better learning interfaces are needed.

There are signs of movement in attitude within Government to big projects from pants-on-the-outside heroic failures followed by sacking the scapegoats. That past view reflects the traditional Martin Barnes view of projects SCOPE, TIME and COST which are linked so changing one will impact the other two and the function of all three restricting quality.

The new approach to large projects is growing out of the work of Werner Ulrich who relates system, observations and evaluations which are linked so changing one will impact the other two. These 3 concepts result in a people focus for projects so that the basis for sharing meaning within projects changes. Who chooses what is reported changes. What is reported, changes. This is more like a jazz band with each person taking the lead at times and different roles supporting each other taking the lead at different times and supporting others who are leading at other times.

This new Government approach starts with the assumption that there is no magic bullet. Then by using 'Engage, Enquire and Enact/Enable' with 'learning in the moment' immediately after every event or action in the field.

There are loads of challenges and no definitive answers, but enablers of success are: basic skills, Instant learning and improvisational leadership. Patrick commented that a major issue is that feedback loops do not work.

#### Requisite Inefficiency – Ivo Velitchkov

Being an entrepreneur, a business leader and a consultant has given Ivo many experiences of employing, working with and supporting colleagues in Business Process Management and today applies this to Enterprise Architecture for a European Organisation. He used Prezi to support a non-linear presentation.

Requisite inefficiency is needed for survival, but is constantly under attack from people who want to make the organisation more competitive and to survive by cutting costs and reducing waste - doing more with less. This debate about how to survive results in tension between these opposing views.

Ivo explored several examples of the need for requisite inefficiency: Firstly the human immune system then genetic algorithms. He then showed how ant behaviour includes requisite inefficiency and how this relates to the VSM. He talked about the threats to European Research, being incurred by insufficient allowance for requisite inefficiency, compared to how potato farmers in Peru are able to survive, by preserving inefficiency in their practices. He then focussed on the failures resulting from IT rationalisation.

This is Ivo's first example which demonstrates what he means by requisite inefficiency:

## Human Cells of the immune system

By reasoning about:

- B(Bone Marrow origin) cells
- T(final stage of development occurs in the Thymus ) cells
- NK(Natural Killer) cells

The mechanisms have to cope with three issues:

1. Is the pathogen part of the body or a foreign body - 'self or not-self'?
2. Has the pathogen been experienced before or is it a new variety?
3. Have we the resources to identify and deal with the quantity of foreign bodies?

The B, T and NK cells interact to accommodate these issues. The mutation rate of B cells is a million times higher than any other cell in the human body.

This creates the variety of 'Y' shaped proteins that bind to specific pathogens. The B cells are factories that create the Y shaped proteins in the bone marrow ready to flood into the bloodstream and release the Y shaped proteins to offer the first stage of protection – to identify foreign bodies. When the Y shaped protein has attached to the unique shaped receptor of the foreign body the T cell tags the pathogen for destruction by the NK cells. By mutating, the Y shaped proteins produce the ability to identify previously unmet foreign bodies. If they find a match then they are replicated. Those which remain unmatched die.

In the immune system(s) response to pathogens that are unknown in variety and quantity need these three types of cells to work together. If they were efficient then people would be vulnerable and exposed to risk of future death. Most of the T-cells die, as only a very small part has antibodies (the Y-shaped receptors) that match the shape of the antigens (the receptors on the surface of the pathogens).

Given that collectively they are creating the requisite variety and quantity of protein anti-bodies to keep the body protected now and into the future, they are operating requisite inefficiency.

After Ivo's illustrations of Requisite Inefficiency in practice, there followed a discussion on glaring examples of institutionalised inefficiency and its impact on service users. So how do we distinguish the requisite part of inefficiency?

This led to two questions:

Can we design the Requisite Inefficiency into systems?

Can we prevent the Requisite Inefficiency being removed from systems?

Ivo provided a simple answer to show this in practical terms. He considered temporary relief of an extreme situation. When there is a strike by Fire-Fighters the Country usually calls upon the Army to temporarily provide this essential service. If the Army were to be reduced to the minimum staffing levels needed to deliver the nation's critical security and all active overseas engagements then there would not be the 'buffer' to support essential national services, so, in some cases Requisite Inefficiency can be achieved by design.

Capability erosion leads to Uncertainty and releases efficiency savings. Unless there are compensating actions in the system this inefficiency will cause capability erosion and the cycle continues. Beware efficiencies that are unaware of this homeostasis between the two cycles. There is a need to maintain the diversity of capabilities across interacting systems.

It is useful to assess retrospectively what has been just inefficient and what has been a survival factor. This feeds learning.

## The Perspectivity Game - Tom Hitchman

The Perspectivity Game puts its participants in the shoes of national politicians. Each team is responsible for the expansion of a virtual economy on the game board. The growth process encompasses the issues that our world leaders are all too familiar with: growth spurts, limited resources, international negotiations, downturns and conflicts.

The players face the crucial trade-off between long-term sustainability and short-term economic growth. The game is followed by a powerful debriefing and group discussion.

The Perspectivity Game is extremely relevant in an era where global sustainability challenges attract daily media attention. It triggers a unique learning experience that will leave the participants with an improved understanding of how a sustainable future could materialise.

**SCiO Open Meeting: Monday 7 April, 10am-5.30pm, concluding with the SCiO AGM at Manchester Business School, Harold Hankins Building, Room**

Note: Entrance is up ramp from Oxford Road end of MBS and through shopping precinct

### **Patrick Hoverstadt - Deciding on structural options: four approaches from four projects.**

One of the perennial issues in using VSM for organisational diagnosis and more acutely for organisational design, is deciding on the relative merits of different options for unfolding the operating structure. In diagnosis, its often one of the most important points to work out whether a different operating structure would offer significant benefits and in any design that goes beyond just tweaking an existing structure, working out the operating structure is the foundation on which the rest of the structure is built. This talk will look at four organisational redesign projects and the different approaches used to work through this problem. We will talk about the reasons for picking different design processes with different clients and relative benefits and issues with each.

### **Ash Moran - Conflict, courage, and theory of constraints**

Conflict is an inevitable part of living in a complex system. It manifests in forms such as competition between individuals, incongruity between a person's words and actions, dilemmas between courses of action, among others.

There are many bad ways to resolve conflict. One is compromise. Two people once argued over how to divide a cake. One wanted to take all of it, the other wanted to share it equally. They compromised, and the first person got three quarters. Fortunately, you don't have to be either of these people.

In this session we will practise a more effective way to resolve conflict. We will use a simple 'conflict resolution diagram' (taken from the Theory of Constraints body of knowledge) to visualise the two opposing sides, challenge the assumptions of each, and find a better overall solution. We will also practise expressing both sides of a conflict in a fair and reasonable way.

### **Arthur Battram - Navigating Complexity**

Arthur was brought in by Carole Hassan, as sole consultant, when she became Chief Executive of Trafford MBC, and needed to kick-start a major reorganisation with her senior management team.

Since his book, Navigating Complexity, was published, he has been failing to produce a sequel under the

working title of 'Natural Management'. This will not be a self-help book for trainers and consultants, nor an over-arching system, nor a spiritual guidebook. 'Natural management' would be about 'managing as if people mattered' and would be a sideways way of looking at and improving the way people work together or don't, shorn of 150 year-old military thinking and unscientific assumptions about employees.

He has some small successes to share with you, and a quirky tool bag of odd tools for you to examine.

### **Ben Taylor - Power+Systems - systems blindness and systems sight**

Ben will present an overview of the Power+Systems approach, developed by Barry Oshry over more than fifty years of experiential work and analysis with people in real life situations. The work helps to create 'systems sight' and help people to see the consistent and predictable patterns driven by human responses to the conditions of organisations – and to give people the potential to choose something different. Ben will give an overview of the approach, its application, and uses. Ben will be arriving from Denver where he is helping to design and facilitate the Power+Systems conference 2014, and Australia where he is helping to launch RedQuadrant Australasia.

## **Thinking Survey**

Dean Burnell is a new member of the SCiO and is currently in the process of studying for his Masters Degree in Systems Thinking in Practice. He is currently undertaking research into the way people think in everyday situations. Part of his research includes a simple survey, issued to many people from all walks of life, ages and nationalities.

He needs help from the systems thinking community...!

It would really help him if you could complete this survey, and then pass the link on to as many others as you can - whether they are systems thinkers or not (simply forward the link). It's an unusual approach to survey design, It's not very long, and shouldn't take more than about 20 minutes to complete.

He has promised share the findings of the survey with the SCiO  
Take the Thinking Survey Here:-

<http://www.TheThinkingSurvey.co.uk>

Thanks everyone

## Calendar 2014

Mon. 13th Jan. 2014 Open - London, BT Business Centre

Sun. 26th Jan. 2014 Development day - Manchester

Sun. 6th Apr. 2014 Development day - Manchester

Mon. 7th Apr. 2014 Open Meeting - Manchester

Sun. 6th July 2014 Development Day - London

Mon. 7th July 2014 Open Meeting - London

## SCiO Board 2013

Chair	Patrick Hoverstadt	Webmaster	Trevor Hilder
Membership	Jane Searles	PDP	Roger Duck
Secretary	Jane Searles	Outreach	
Treasurer	Steve Hales	Non-Exec	Alex Hough
Meetings	Ben Taylor	Non-Exec	Doug Haynes
Dev.Days	Tony Korycki	Non-Exec	Trevor Hilder
Newsletter	Gordon Kennedy		

## WANTED!

Book reviews,  
Articles  
Viewpoints  
Stories from the field

Is it systematically systemic? Is it strategically stratified?

Send it in!

The SCiO Newsletter NEEDS YOU!

**Seriously folks, this is a small opportunity to share something that you have or know with a bunch of people who are thinking along the same lines.**

Website: [scio.org.uk/systems](http://scio.org.uk/systems)  
Membership enquiries: Jane Searles ([jane.searles@scio.org.uk](mailto:jane.searles@scio.org.uk))  
Newsletter contact: Gordon Kennedy ([gordon.kennedy@scio.org.uk](mailto:gordon.kennedy@scio.org.uk))  
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